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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,081

06/22/2006

Marco Annoni

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12/11/2008

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EXAMINER

DOAN, KIET M

ART UNIT

PAPER NUMBER

2617

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,081	<b>Applicant(s)</b> ANNONI ET AL.	
	<b>Examiner</b> KIET DOAN	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/22/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is response to Preliminary amendment file on 06/22/2006.

Claims 1-37 are cancelled.

Claims 38-74 are new.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 74 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is noted that computer programs or computer program products do not define any structural and functional interrelationships between computer program and other claimed elements of computer which permit the computer program's functionality to be realized. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 38-68 and 70-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everett (US 5,857,152) in view of Tokitsu et al. (US 2002/0032506 A1).

Consider **claims 38, 52 and 73 and 74**. Everett teaches a method for identification and registration of a moving object entering a pre-determined area to be monitored, said identification operation comprising interaction between said moving object and an area access system associated with said predetermined area and comprising supplying identification information, said registration operation being carried out over a wireless communication link to a control center (Col.3, lines 22-43, Fig.1 and Fig. 3, show the vehicle 13 entering the toll area 3 as read on pre-determined area to be monitored by camera 7,8 and 9), comprising the steps of:

identifying said moving object through a mutual interaction between said moving object and the area access system, said mutual interaction being performed over a wireless short range communication link (Col. 2, lines 56-67, Fig.1 show teach vehicle 13 entering the toll are wherein the short range transmitter 10, 11 and 12 perform short range communication link). **Everett fails to explicitly teach**

performing said registration operation by establishing a wireless communication link of the long-range type between said moving object and said control center upon activation of said mutual interaction on the wireless short range communication link.

In an analogous art, **Tokitsu teaches** performing said registration operation by establishing a wireless communication link of the long-range type between said moving object and said control center upon activation of said mutual interaction on the wireless short range communication link (Abstract, Paragraphs [0032-0034], Fig.1, Illustrate roadside unit 3 that communicated with vehicle 1 though GPS satellite which read on

establishing a wireless communication link of the long-range type and wherein the management center 5 perform registration operation).

Therefore, it would have been obvious at the time that the invention was made to modify Everett with Tokitsu's system such that identifying and registration the moving mobile that entering the predetermine area by establishing a wireless communication link of the long-range type between said moving mobile and said control center upon activation of said mutual interaction on the wireless short range communication link in order to improve the tracking mobile device where about when entering predetermine area.

Consider **claims 39 and 53**. The combination Everett and Tokitsu teach the method of claim 38. Further, Tokitsu teaches wherein said supplying identification information comprises the step of sending control center address information to the moving object (Paragraphs [0049-0051]).

Consider **claims 40 and 54**. The combination Everett and Tokitsu teach the method of claim 39. Further, Tokitsu teaches wherein said supplying identification information comprises sending moving object information (Paragraph [0049], [0056]).

Consider **claims 41 and 55**. The combination Everett and Tokitsu teach the method of claim 39. Further, Tokitsu teaches wherein said identification operation comprises the steps of: sending an identification request message from the area access

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system to the moving object, said identification request message comprising said control center address information; and sending an identification response message from the moving object to the area access system, said identification response message comprising said moving object information (Paragraphs [0049-0051], [0055-0058], Fig.3, Illustrate and described) .

Consider **claims 42 and 56**. The combination Everett and Tokitsu teach the method of claim 41. Further, Tokitsu teaches wherein said registration operation comprises the steps of: sending a registration request message from the moving object to the control center, said registration request message comprising said moving object information; sending a registration response message from the control center to the moving object, said registration response message comprising acceptance information (Paragraphs [0053-0059], Fig.3, Illustrate and described).

Consider **claims 43 and 57**. The combination Everett and Tokitsu teach the method of claim 38. Further, Tokitsu teaches comprising the step of providing and managing a vehicle status parameter at the moving object, which value indicates the moving object position with respect to said predetermined area to be monitored (Paragraph [0035]).

Consider **claim 44 and 58**. The combination Everett and Tokitsu teach the method of claim 38. Further, Tokitsu teaches wherein after said identification operation,

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the area access system sends a moving object parameters message, comprising at least part of said identification information, to the control center (Paragraph [0047]).

Consider **claims 45 and 59**. The combination Everett and Tokitsu teach the method of claim 42. Further, Tokitsu teaches wherein said registration request message further comprises a moving object phone number (Paragraph [0111]).

Consider **claims 46 and 60**. The combination Everett and Tokitsu teach the method of claim 42. Further, Tokitsu teaches said registration response message further comprises a control center phone number and/or map information and/or prognostic feature data (Paragraph [0111-0112]).

Consider **claims 47 and 61**. The combination Everett and Tokitsu teach the method of claim 38. Further, Tokitsu teaches comprising exchanging further information messages between a driver of the moving object and the moving object (Paragraph [0033]).

Consider **claims 48 and 62**. The combination Everett and Tokitsu teach the method of claim 38. Further, Tokitsu teaches comprising a de-registration operation that comprises the steps of: detecting the exit of the moving object from the predetermined area to be monitored through a further mutual interaction between said moving object (Paragraph [0038]) and the area access system, said mutual interaction being

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performed over a wireless short range communication link (Paragraph [0033]); upon activation of said detection operation, performing said de-registration operation by said moving object on said long-range communication link with said control center; and terminating said long-range communication link (Paragraph [0044-0048]).

Consider **claims 49**. The combination Everett and Tokitsu teach the method of claim 38. Further, Tokitsu teaches wherein in said registration operation, said long range wireless communication link is at least partly carried out via a wireless mobile network (Paragraph [0032] teach the communicate though GPS satellite as read on long range).

Consider **claims 50 and 71**. The combination Everett and Tokitsu teach the method of claim 38. Further, Tokitsu teaches comprising performing an intermediate notification operation of the passage of the moving object at an intermediate barrier within said area upon activation of a further interaction on the wireless short range communication link (Paragraph [0032-0033], [0035]).

Consider **claims 51 and 72**. The combination Everett and Tokitsu teach the method of claim 50. Further, Tokitsu teaches wherein a notice of said intermediate notification operation is transmitted to said control center by said wireless communication link of the long-range type between said moving object and said control center (Paragraph [0032], [0034] teach the communicate though GPS satellite as read



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on long range).

Consider **claim 63**. The combination Everett and Tokitsu teach the system of claim 52. Further, Tokitsu teaches wherein said interaction modules are access barriers and said fixed points are placed substantially at the boundaries of said predetermined area (Paragraph0033] teach road side unit 3 as read on fix point are placed substantially at the boundaries of said predetermined area)

Consider **claim 64**. The combination Everett and Tokitsu teach the system of claim 62. Further, Tokitsu teaches wherein said access barriers are configured also for automatic toll collection (Paragraph [0032], Fig.1 Illustrate and described)

Consider **claims 65**. The combination Everett and Tokitsu teach the system of claim 52, Further, Tokitsu teaches wherein said predetermined area encompasses a tunnel and said access barriers are placed at a distance from the tunnel boundaries sufficient to ensure that the moving object is registered and monitored before entering said tunnel (Paragraphs [0032-0033] Tokitsu teach the toll charging system for mobile moving though toll area but silent on tunnel). It would have been obvious to at the time that the invention was made to having tunnel including in the toll area to collect fee when mobile entering the tunnel.

Consider **claims 66 and 67**. The combination Everett and Tokitsu teach the system of claim 52. Further, Tokitsu teaches wherein said short range communication link is a Bluetooth link and said interaction modules and said object communication and control module are equipped with Bluetooth communication modules (Paragraph [0033], [0035] teach short range communication which obvious can be Bluetooth communication).

Consider **claim 68**. The combination Everett and Tokitsu teach the system of claim 52. Further, Tokitsu teaches wherein said long range wireless communication link is at least partly effected via a wireless mobile network and said control center and said object communication and control module are configured for accessing said wireless mobile network (Paragraphs [0032-0034]).

Consider **claim 70**. The combination Everett and Tokitsu teach the system of claim 52. Further, Tokitsu teaches wherein the moving object is a vehicle (Fig.1, No.1).

5        Claims 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everett (US 5,857,152) in view of Tokitsu et al. (US 2002/0032506 A1) and further view of Pollari (US 2004/0267645 A1).

Consider claim 69. The combination Everett and Tokitsu teach the system of claim 52, **but is silent on** wherein said wireless mobile network is a GPRS network.

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In an analogous art, **Pollari teaches** wherein said wireless mobile network is a GPRS network (Paragraphs [0011], [0028]).

Therefore, it would have been obvious at the time that the invention was made to modify Everett and Tokitsu with Pollari system's such that wireless mobile network is a GPRS network in order to improve data transmission without delay.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIET DOAN whose telephone number is (571)272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Appiah N. Charles can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kiet Doan/  
Examiner, Art Unit 2617

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617